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THE

NATURAL RESOURCES

OF ALABAMA,

DISPLAYED IN THE EXHIBIT

— OF THE —

LOUISVILLE AND NASHVILLE RAILROAD COMPANY,

— AT THE —

SOUTHERN EXPOSITION,

LOUISVILLE, KENTUCKY.

A COMPLETE CATALOGUE,

SERVING AS A GUIDE TO THE EXHIBIT, WITH NOTES.

BY CHAS. MOHR,

AGENT AND EXPERT ON FORESTRY FOR TENTH CENSUS.

CORRESPONDING MEMBER OF THE ACADEMY OF NATURAL SCIENCES, PHILA., &C.

MOBILE, ALA.:

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2729 3

INTRODUCTION.

The object of this exhibit is to give a true representation of the great and manifold natural resources of Alabama, particularly of those parts of the State contiguous to the Louisville and Nashville Railroad line. To arrive at this aim less stress was laid in procuring products of extraordinary traits of quality than in obtaining them of a character to serve as a fair exponent of Alabama's resources and to convey a correct idea of the expectations to be realized by the investment of labor and capital.

Extending from the shores of the Gulf of Mexico beyond the northern confines of the basin of the Tennessee river, through more than 5 degrees of latitude, with conditions of soil as widely differing as those of climate, the products of the vegetable world found within the limits of the State are necessarily of a great variety, embracing those of the sub-tropical zone combined with those of the temperate regions of the North. Scarcely less great is the variety of the products derived from the mineral kingdom, whose unsurpassed riches in those of its resources tending most to the advancement of mankind offer an unequalled and most inviting field for the capitalist and laboring man. The development of Alabama's iron and coal mines, during the later half of the past decade, has met fully the expectations of those engaged in it and the encouraging results achieved during that short period of time have imparted an impetus to all the industries connected with it, which cannot fail to place Alabama in a near future to a position of industrial and commercial importance rivalling the most favored among the older of its sister States.

In naming the articles scientific accuracy has been constantly kept in view; without it the scientific interest with its educational value of an exhibit of such a nature will be lost, not less suffer by a neglect of this point its purely practical aspects. It is only in this way that one is enabled to call the products of nature by their distinct names accepted by all, and that many of the mistakes can be avoided which stand in the way of their utilization arising from the confusion existing in the nomenclature commonly in vogue.

CLASS I.

FOREST PRODUCTS.

Collected by CHAS. MOHR, Mobile, Ala.

Of the 125 or 130 species of plants of an arborescent growth so far known to occur in Alabama, 96 are represented in the exhibit by wood specimens. The Bitter Nut *(Carya amara)*, the fetid Buckeye *(Aesculus glabra)*, with the Prickly Ash *(Xanthoxylum Clavœ Hercules)* are shown only by botanical specimens, the rest including trees of lowest order and found more frequently of a shrubby habit of growth have been omitted. Each one of the trees numbered in the following list is represented by a cross section of the trunk 2½ feet in length, and by smaller sections cut lengthwise, partially finished, to show the grain of the wood and the finish it is capable of, accompanied by a botanical specimen in flower and fruit; each tree having been felled under the eyes of the collector, and its botanical character determined on the spot, this collection can be regarded as a reliable guide to those especially interested in the forestry of the State, and calculated to correct the many errors prevailing in regard to the sources from which the various kinds of woods are derived.

The timber trees of any economical value are represented, with but few exceptions, by sections of a circumference corresponding with the full average diameter of the logs as they are brought to the sawmill. Besides a few sections of the Oak, Red Gum, and Cypress of largest growth, planks of the most important and valuable kinds of timber made from trees far above the average dimensions have been furnished by Messrs. Arantz Brothers, Decatur; Mr. A. C. Danner, of the Danner Land and Lumber Company; Messrs. Stoutz & Co., Mobile.

The efforts in making this collection have been directed to give in connection with these fine specimens of merchantable lumber, as near as possible a true representation of Alabama's timber wealth. To assist the visitor in that object, he is referred to the timber map of the State, drawn from the field notes of the writer, by Wm. McNeil, Esq., of Mobile. This map gives the distribution of each of the more important forest trees throughout the State, and the areas of its great lumbering regions.

The large grain case placed in the centre of the exhibit designed by Mr. R. W. Wilda, and madeby Robt. Mansfield of Louisville, Kentucky, of native woods of Alabama, exhibits strikingly the adaptability of the various kinds of lumber for the highest grades of ornamental furniture.

1—MAGNOLIA GRANDIFLORA, L., MAGNOLIA, BULL BAY. Mobile County.

2—MAGNOLIA ACUMINATA, L., CUCUMBER TREE. Cullman Co.

3—MAGNOLIA MACROPHYLLA, Mchx., LARGE-LEAVED CUCUMBER TREE. Cullman County.

4—MAGNOLIA UMBRELLA, Lam., UMBRELLA TREE. Winston Co.

5—MAGNOLIA GLAUCA, L., SWEET BAY, WHITE BAY. Mobile Co.

6—LIRIODENDRON TULIPIFERA, L., YELLOW POPLAR, Tulip Tree. Cullman County.

7—ASIMINA TRILOBA, Dun., PAPAW. Blount County.

8—TILIA HETEROPHYLLA, Vent., WHITE BASSWOOD. Cullman County.

9—TILIA AMERICANA, L., BASSWOOD, LEN or LINDEN TREE. Cullman County.

10a—VITIS ÆSTIVALIS, L., SUMMER GRAPE. Cullman County.

10—ILEX OPACA, L., HOLLY. Mulberry Fork, Warrior river, Blount County.

11—ILEX CASSINE, L., YOUPON. Mobile County.

12—CLIFTONIA LIGUSTRINA, Banks, TI-TI. Mobile County.

13—AESCULUS FLAVA, Ait., LARGE YELLOW BUCKEYE, Mount Sano. Madison County.

AESCULUS GLABRA, Wild, TETID BUCKEYE. Botanical specimen only.

4—AESCULUS PARVIFLORA, Walt., SMALL FLOWERED BUCKEYE. Tuscaloosa. Prof. E. A. Smith.

15—ACER RUBRUM, L., RED MAPLE. Cullman County.

16—ACER SACCHARINUM, SUGAR MAPLE. Cullman County.

16b—ACER SACCHARINUM, *Var: nigrum.* BLACK SUGAR MAPLE.

17—ACER DASYCARPUM, Erh., SILVER MAPLE. Tuscaloosa County.

18—NEGUNDO ACEROIDES, Moench, BOX ELDER. Blount County.

19—RHUS COTINOIDES, Nutt, SHITTEM WOOD, ALABAMA SMOKE TREE. Madison County.

20—MELIA AZEDERACH, L., CHINABERRY TREE, introduced, Mobile.

21—GLEDITSCHIA TRIACANTHOS, L., HONEY LOCUST. Blount Co.

22—CERCIS CANADENSIS, L,, REDBUD. Blount Springs, Blount County.

23—PRUNUS AMERICANA, Marsh, WILD PLUM.—Cullman County.

24—PRUNUS SEROTINA, Ehrt., WILD CHERRY. Cullman County.

25—PIRUS ANGUSTIFOLIA, SOUTHERN CRABAPPLE. Cullman County.

26—CRATÆGUS ÆSTIVALIS, T. & Gr., APPLE HAW. Mount Vernon, Mobile County.

27—CRATÆGUS SPATHULATA, Mchx., SMALL FRUITED HAW. Cullman County,

28—LIQUIDAMBAR STYRACYFLUA, L., SWEET GUM, RED GUM. Cullman County. Specimen from Mulberry Fork, Blount County, 46 inches in diameter.

On account of its fine grain, pleasing, reddish tint as shown in the plank No. 106, and the facility with which it is worked, the wood of this tree has come of late years in considerable demand for the manufacture of Furniture. Large supplies of this truly valuable timber are found in the lowland forests of the central and upper districts.

29—CORNUS FLORIDA, L., DOGWOOD. Blount County.

30—NYSSA UNIFLORA, Walt., TUPELO GUM, Stockton, Baldwin Co.

One of the largest trees; abundant in the inundated forests swamps of the lower part of the State. The wood is of a fine white color, soft and particularly adapted for carved hollow-ware, trays bowls, etc., as shown by the African soup bowl and tray made by Windson Bryant, colored, of Sumpter Co.

31—NYSSA MULTIFLORA, Wang., SOUR GUM, BLACK GUM. Cullman Co.

32—NYSSA CAROLINIANA, Walt., BLACK GUM. Springhill, Mobile County.

33—ARALIA SPINOSA, L., FALSE PRICKLY ASH. Cullman Co.

34—VACCINIUM ARBOREUM, L., FARKLE BERRY. Springhill, Mobile County.

35—OXYDENDRUM ARBOREUM, DC., SOUR WOOD. Cullman Co.

36—DIOSPYROS VIRGINIANA, L., PERSIMMON. Cullman Co.

37—SYMPLOCOS TINCTORIA, L. Her, SWEET LEAF, YELLOW WOOD. Springhill, Mobile County.

38—HALESIA TETRAPTERA, L., OPOSSUM WOOD. Blount Co.

39—FRAXINUS PLATYCARPA, Mch., WATER ASH, POPP ASH, Stockton, Baldwin County.

40—FRAXINUS VIRIDIS, L., GREEN ASH, Stockton. Baldwin Co.

41—FRAXINUS AMERICANA, L., WHITE ASH. Cullman County.
The timber of this tree is highly esteemed for the manufacture of handles, oars, and many other implements where lightness with elasticity and strength is required, is yet found abundantly and of the best quality in the rich valleys of the northern part of the State. (See plank No. 98, from Arantz Brothers.)

42—CATALPA BIGNONIOIDES, Walt., CATALPA TREE. Baldwin Co.

43—PERSEA CAROLINIANA, Var., Palustris Chap., RED BAY. Springhill, Mobile County.

44—SASSAFRAS OFFICINALE, Nees, SASSAFRAS. Cullman Co.

45—ULMUS AMERICANA, L., WHITE ELM, 21 inches in diameter. Cullman County.

46—ULMUS ALATA, Mchx., WAHOO, WATER ELM. Cullman Co.

46b—ULMUS ALATA, Mch., of extraordinary dimensions, nearly 2 feet in diameter. Mount Vernon, Mobile Co.

47—ULMUS AMERICANA, var Aspera, Chap., SWAMP ELM. Baldwin County.

48—ULMUS FULVA—Mchx., SLIPPERY ELM. Cullman Co.

49—VIBURNUM PRUNIFOLIUM, L., BLACKHAW. Cullman Co.

50—OSMANTHUS AMERICANUS, Lour. Mobile Co.

51—CELTIS MISSISSIPPIENSIS, Bosc, SOUTHERN HACK BERRY. Blount County.

52—MORUS RUBRA, L., MULBERRY. Mulberry Fork of Black Warrior river, Blount Co.

53—PLATANUS OCCIDENTALIS, L., SYCAMORE. Mulberry Fork of Black Warrior river, Blount Co.

54—IUGLANS CINEREA, L., WHITE WALNUT, BUTTERNUT. Blount Springs.
Bark extensively used for medicine and dyeing; getting scarce.

55—IUGLANS NIGRA, L., BLACK WALNUT. Blount County.
The specimen exhibited is far below average size. Is already scarce along the highways of commerce; considerable quantities of this valuable timber of best quality are yet found in the valleys of central and northern portions of the State more remote from the means of transportation. Plank No. 107, Arantz Brothers.

56—CARYA ALBA, Nutt, WHITE OR SCALY BARK HICKORY. Cullman Co., diameter 24 inches.

57—CARYA PORCINA, Nutt, PIGNUT HICKORY, diameter 21 inches. Cullman County.

58—CARYA TOMENTOSA, Nutt, MOCKERNUT, BIGBUD HICKORY, diameter 24 inches. Cullman Co.
Large supplies of the valuable Hickory timber are found throughout the northern part of the State, affording ample material for many of the industrial enterprises for which its use is required.

59—CARYA AQUATICA, Nutt, BITTER PECAN, WATER HICKORY. Mobile County.

60—QUERCUS ALBA, L., WHITE OAK, diameter 25 inches. Mariot's Creek, Cullman Co. Plank No. 108, Arantz Brothers.

61—QUERCUS STELLATA, Wild., POST OAK, diameter 21 inches. Cullman County.

62—QUERCUS DURANDI, Buckley, BASTARD OAK. Little Cahaba river, Tionus P. O., Bibb Co. Somewhat below average.

63—QUERCUS LYRATA, Walt., OVERCUP OAK, diameter 2 feet. Montgomery.

64—QUERCUS VIRENS, L., LIVE OAK, diameter 18 inches, age 20 years. Mobile County.

65—QUERCUS MICHAUXII, Nutt, SOUTHERN WHITE OAK, SWAMP CHESTNUT OAK, COW OAK, BASKET OAK, diameter 22 inches; below average. Cullman County.

Specimens from bottoms on Mulberry Fork of Warrior river, Blount County, placed on east end of this collection measures 48 inches in diameter, taken from a tree 116 feet high, furnishing a clear stick of timber 66 feet in length. With this tree upon an area not exceeding one acre, eight trees of the same kind were counted, giving sticks of timber of an average length of 45 feet and 40 inches in diameter. The importance of this timber tree abounding in the lowlands of the upper portion of the State will be apparent when it is considered that in the qualities of its wood it is fully equal to that of the White Oak and strictly applicable to all the manifold uses the timber of that tree enters into.

66—QUERCUS PRINUS, L., CHESTNUT OAK, MOUNTAIN OAK, TANBARK OAK. Cullman County.

The mountainous districts of North Alabama furnish a large quota of the tanbark used in the large tanneries of Louisville and other Western markets.

67—QUERCUS MUEHLENBERGII, Engelm, CHINQUAPIN OAK. Little Cahaba river, Tionus P. O., Bibb Co., Ala.

68—QUERCUS PHELLOS, L., SOUTHERN WILLOW OAK. Springhill, Mobile Co.

69—QUERCUS AQUATICA, L., WATER OAK. Springhill, Mobile Co.

70—QUERCUS CINEREA, Mchx., BLUE JACK, UPLAND WILLOW OAK. Springhill, Mobile County.

71—QUERCUS NIGRA, L., BLACK JACK. Cullman Co.

72—QUERCUS RUBRA, L., RED OAK. Mariot Creek, Cullman Co.

73—QUERCUS COCCINEA, Wangh, SCARLET OAK. Cullman Co.

74—QUERCUS TINCTORIA, Bart, BLACK OAK, YELLOW BARK OAK. Cullman County.

75—QUERCUS CATESBÆI, Mich., BARREN OAK, TURKEY OAK. Springhill, Mobile County.

76—QUERCUS FALCATA, Michx., SPANISH OAK. Cullman County.

The hi :h finish the wood of this tree is capable of is well shown in the plank No. 100 from the mills of Crantz & Brothers, and the pannels used in the construction of the grain case.

77—CASTANEA VULGARIS, Lam. Var. Americana, (C. Vesca v. Americana) CHESTNUT. Cullman County.

78—CASTANEA PUMILA, Michx., CHINQUAPIN. Springhill, Mobile County.

79—CARPINUS CAROLINIENSIS, Walt., HORNBEAM. Cullman Co.

80—OSTRYA VIRGINICA, Wild, IRONWOOD. Cullman County.

81—FAGUS FERRUGINEA, Ait., BEECH. Cullman County.

82—BETULA NIGRA, L., RIVER BIRCH. Banks Mulberry Fork of Warrior river, Blount County.

83—BETULA LENTA, Mich., SWEET BIRCH, MOUNTAIN BIRCH. Winston County.

84—POPULUS MONILIFERA, Ait., COTTONWOOD. Mobile County.

85—POPULUS HETEROPHYLLA, BLACK COTTONWOOD. Stockton, Baldwin County.

86—SALIX NIGRA, Mch., BLACK WILLOW. Mobile County.

87—TAXODIUM DISTICHUM, CYPRESS. Section taken from a young tree below average size. Stockton, Baldwin County.

A section of largest dimension, 56 inches in diameter, has been furnished by the Danner Land and Lumber Company, with a board from the same measuring 55 inches, showing the fine qualities of Cypress lumber from the lower Alabama river.

88—JUNIPERUS VIRGINIANA, L., RED CEDAR, of finest quality. Cullman County.

In the valleys of the northern part of the State, as well as the limestone regions more southward, this tree is yet found abundant, yielding sticks of fine quality.

89—CHAMÆCYPARIS SPHŒROIDEA, Sp., WHITE CEDAR, JUNIPER. Mount Vernon, Mobile County.

Well-fitted for the manufacture of hollow-ware and fine cooperage, abundant in the swamps of the lower Alabama and Tombigbee rivers.

90—TSUGA CANADENSIS, Carr, HEMLOCK SPRUCE, found only on the head waters of the Sipsey river in Winston County.

90—Bark of Hemlock Spruce; used for tanning.

91—PINUS AUSTRALIS, Michx., LONG-LEAF PINE, SOUTHERN PITCH PINE, HARD PINE. Mobile County.

A fine specimen of full growth, 117 feet in height, from Brewton, Escambia County, is placed in front of the main entrance of the southern wing of the building to serve as a flagstaff. The peculiarly grained variety of Yellow Pine lumber, called Curly Pine, is shown in the planks Nos. 120-23, furnished by the Danner Land and Lumber Company of Mobile. The great beauty of its grain, combined with its delicate shades of yellow and brown and admitting of the highest finish, place the Curly Pine amongst the most valuable of woods in ornamental cabinet work, as shown by the pannels used in the construction of the grain case in the exhibit.

The adaptability of the best quality of Long-leaf Pine lumber for the cabinet maker and the builder is strikingly illustrated in the construction of the office of this exhibit, built entirely of Alabama Hard Pine and furnished by the Pratt Saw Mill Co., of Verbena. The forests of Long-leaf Pine in Alabama form four separate regions, as will be seen by consulting the timber map, v. c., the maritime pine region, the central pine belt, the forests of the Coosa river and the isolated forest in Walker County, covering in the aggregate an area of about 12,000 square miles. The amount of merchantable pine standing has been computed by the writer for the reports of the Census of 1880 to equal 19,000,000,000 feet linear m., and the amount of timber cut, during the twelve months expiring with the Census year to 245,396,000 feet. According to such a rate of consumption, the supply of Long-leaf Pine lumber would last for the next eighty years to come. The vastly increasing inroads into these forests by the production of naval stores involving their utter destruction within a few years after their invasion, will lead, however, to a complete exhaustion of these resources within a much shorter limit of time, without any hope for their restoration.

92—PINUS TÆDA, L., LOBLOLLY PINE. Cullman County.

93—PINUS CUBENSIS, Humbold, CUBAN PINE, ROSEMARY PINE, SLUSH PINE, SWAMP PINE. Springhill, Mobile County.

A tree of much more rapid growth than the Long-leaf Pine, and like the preceding, furnishing lumber of somewhat inferior quality, solely fit for inside work.

94—PINUS MITIS, Michx., SHORT LEAF PINE. SOFT YELLOW PINE. Cullman County.

Forms a considerable portion of the forest growth in the upper part of the coast Pine belt and the uplands in the northern part of the State. In the quality of its timber it is scarcely inferior to that of the Long-leaf Pine, and considerable quantities of it find their way from the mills of North Alabama to Northern markets.

95—PINUS INOPS, L., DWARF PINE. MOUNTAIN PINE. Winston Co.

96—PINUS GLABRA, Walt., SPRUCE PINE. Stockton, Baldwin Co.
97—SABAL ADANSONII. DWARF PALMETTO. BLUE PALMETTO.

SPECIMENS OF LUMBER AND OTHER WOOD PRODUCTS.

98—WHITE ASH, Arantz Brothers, Decatur.
99—YELLOW POPLAR, Arantz Brothers, Decatur.
100—SPANISH OAK, falsely called RED OAK. Arantz Brothers, Decatur. Beautifully curled.
101—SOUTHERN WHITE OAK, CHESTNUT WHITE OAK, (Quercus Michauxii), of a very fine grain. Arantz Brothers, Decatur.
102—CHESTNUT. Arantz Brothers, Decatur.
103—LINDEN, OR LIN. Arantz Brothers, Decatur.
104—SASSAFRAS. Arantz Brothers, Decatur.
105—RED GUM. Stoutz & Brother, Mobile.
106—RED GUM. Arantz Brothers, Decatur.
107—BLACK WALNUT. Arantz Brothers, Decatur.
108—WHITE OAK, (QUERCUS ALBA). Arantz Brothers, Decatur.
109—WILD CHERRY. Arantz Brothers, Decatur.
110-111—LOBLOLLY PINE. J. Armbruster, Cullman.
112—CYPRESS, B. McMillan & Son, Stockton, Baldwin County.
113-114—SHORT-LEAF PINE. Armbruster, Cullman.
115-117—LONG-LEAF PINE, OR HARD YELLOW PINE, A. C. Danner Land and Lumber Company, Mobile.
120-122—CURLY PINE, finished and polished. A. C. Danner Land and Lumber Company, Mobile.
123—CYPRESS PLANK, 55 inches in diameter. A. C. Danner & Co. Sawed at mill of Silver and Estis, Baldwin County.
124-125—Two pieces of square LONG-LEAF PINE timber. Conecuh County.
126-130—CYPRESS SHINGLES, hand-drawn and machine-made. A. C. Danner Land and Lumber Company, Mobile.

CLASS II.

PRODUCTS OF THE FIELDS, GARDENS, ORCHARDS.

GRASSES AND OTHER FORAGE PLANTS.

The number of true Grasses found growing without cultivation within the limits of the State can be said to embrace 150 to 160 species, including those introduced from various parts of the world, and now more or less naturalized. Most of those are represented in the collection on exhibition, which has been made by Chas. Mohr, besides the foreign kinds adapted for cultivation. In consulting the collection it cannot fail to appear that in its resources for pasturage, green forage and hay crops, Alabama, throughout its different sections, compares favorably with other regions famous for their advantages offered to raising of live stock. Over 50 different kinds of plants of this class, growing spontaneously in the State, are found to be relished by stock, some of great, and all of more or less nutri-

tive value. The cultivation of the meadow grasses proper and of Red Clover, succeeds well throughout the northern half of the State, as will be seen by the samples of hay in the Cullman collection, viz.: Nos. 186, 188 and 189. Southward, including the semi-tropical coast region, no less valuable substitutes for the same are found in various grasses and forage plants introduced from the warmer zones. There the invaluable Cow Pea (No. 194, B. Grasses, from Cullman, in bundles), with the Mexican Clover (No. 183, Grasses from Cullman,) take the place of the Red Clover, and fields of German Millet, No. 192, Johnson Grass No. 191, true Guinea Grass, Mohr's botanical collection of Grasses, No. 156, Crab Grass No. 103, ibid that of the Northern hay grasses, and the Bermouda Grass No. 38, and the broad-stemmed Paspalum *(P. laticulmum)* No. 100, of the same collection, offer an almost perennial pasture fully equal in nourishing qualities to any of the Northern pasture grasses. In the Japanese Clover, *(Lespedeza striata,)* No. 172 Mohr's collection, the wild range has, by the unprecedented spread of this plant throughout the whole State improved in a way, to keep even in the poorer districts, the herds in good order from the beginning of the summer to the advent of frost.

1—LEERSIA ORIZOIDES, Sw., FALSE RICE.
2—LEERSIA HEXANDRIA, Mchx.
3—LEERSIA VIRGINICA, Willd.
} Growing in stagnant water, of no value.

4—ZIZANIA AQUATICA, L. WILD RICE. Growing in stagnant water, of some value.

5—HYDROCHLOA CAROLINENSIS, Beauv., FLOATING GRASS. In brooks aud springy places, good throughout the year.

6—ALOPECURUS GENICULATUS, L., WILD FOXTAIL. Of little value.

7—ALOPECURUS PRATENSIS, L. MEADOW FOXTAIL, introduced. Valuable.

8—PHLEUM PRATENSE, L., TIMOTHY, introdued. Highly valuable.

9—SPOROBOLUS JUNCEUS, Kth., WIRE GRASS. Sterile pine barrens. Of no value.

10—SPOROBOLUS INDICUS, Br., SMUT GRASS, In dry poor soil. Valuable.

11—VILFA ASPERA, Beauv. Of no value.

12—VILFA VAGINÆ FLORA, Torr. Of no value.

13—AGROSTIS SCABRA, Wild. ROUGH BENT GRASS. Of no value.

14—AGROSTIS ARACHNOIDES, Ell., SPIDER BENT GRASS. No value.

15—AGROSTIS PERENNANS, Tom. Of some value,

16—AGROSTIS VULGARIS, W., RED TOP, HERDS GRASS. Valuable in the northern districts.

17—AGROSTIS ALBA, L. WHITE BENT GRASS. Extensively naturalized; good for winter pasture.

18—CINNA ARUNDINACEA, Willd., SWEET REED. Good.

19—MUEHLENBERGIA DIFFUSA, Scha., NIMBELWILL. A common, valuable pasture grass.

20—MUEHLENBERGIA MEXICANA, Frin. Of little value.

21—MUEHLENBERGIA SYLLVATICA, F. & Gr. Of little value.

22—MUEHLENBERGIA TRICHOPODES, Chap. Worthless.
23—THURBERA ARKANSANA, Benth, A fine spring Grass, but scarce.
24—BRACHYELYTRUM ARISTATUM, Beauv. Of little value.
25—CALAMAGROSTIS NUTALLIANA, Steerd. Of little value.
26—STIPA AVENACEA, L., Feather Grass. Of little value.
27—ARISTIDA LANATA, Poir, Wooly Poverty Grass. Of no value.
28—ARISTIDA PURPARASCENS, Poir, Beard Grass
29—ARISTIDA VIRGATA, Trin., Beard Grass.
30—ARISTIDA SPICATA, Ell., Spiked Beard Grass.
} Grasses of a poor soil, of no value.
32—SPARTINA JUNCEA, Willd., Saltmarsh Grass. Of no value.
33—SPARTINA GLABRA, Willd., Marsh Grass. Of no value.
34—SPARTINA POLYSTACHYA, Willd., Many Spiked Marsh Grass. Of no value.
35—GYMNOPOGON RACEMOSUS, Beauv. Of little value,
36—GYMNOPOGON RACEMOSUS var. brevifolius. Of little value.
37—EUSTACHYS PETRÆA, D. C. Seaside Finger Grass. Of little value.
38—CYNODON DACTYLON, Pers. Bermuda Grass. Of greatest value as a pasture grass.
39—CTENIUM AMERICANUM, Toothache Grass. Of no value.
40—BOUTELOA CURTIPENDULA. B. Of little value.
41—DACTILOGENIUM ÆGYPTIACUM, Spr., Egyptian Crowfoot, Little value.
42—EULUSINE INDICA, L., Barnyard Grass. Of some value.
43—LEPTOCHLOA MUCRONATA, Kth, A valuable grass.
44—TRICUSPIS SESLEROIDES, Torr. Of some value.
45—TRICUSPIS AMBIGUA, Torr. Worthless.
46—TRICUSPIS AMERICANA, Beauv. Worthless.
47—DACTYLIS GLOMERATA, L., Orchard Grass. One of the best meadow grasses of the upper districts.
48—EATONIA OBTUSATA, Gray, Early Bunch Grass,
49—EATONIA PENNSYLVANICA, Gr.
50—EATONIA PENNSYLVANICA var filiformis, Chep.
} Good early annual grasses.
51—MELICA MUTICA, Willd., Melic Grass. Of little value.
52—GLYCERIA NERVATA, Trin., Manna Grass. Valuable.
53—ARUNDINARIA GIGANTEA, Chep.
54—ARUNDINARIA TECTA, Muchl.
} Cane—Highly valuable for winter pasture.
55—BRIZOPYRUM SPECATUM, Hook. Saltmarshes. Of no value.
56—POA ANNUA, L., Low Spear Grass. An early annual of some value.
57—POA CRISTATA, Ell. Scarce, of some value.
58—POA COMPRESSA, L., Creeping Spear Grass. Valuable.
59—POA PRATENSIS, L., Blue Grass. Rich calcareous soil. Upper districts. Highly valuable.
60—POA TRIVIALIS, L., Rough Meadow Grass. Introduced. A good pasture grass.
61—POA FLEXUOSA, Muchl., Rich wood. Upper districts. Valuable.
62—POA SYLVESTRIS, Gorz. Rich wood. Upper districts. Valuable.

63—POA ALSODES, Gr. Rich wood. Upper districts. Valuable.
64—POA SEROTINA. Rich wood. Upper districts. Valuable.
65—ERAGROSTIS REPTANS, Nees, CREEPING ERAGROSTIS.
66—ERAGROSTIS MEGASTACHYA, Gray, LARGE ERAGROSTIS.
67—ERAGROSTIS CILIARIS, L.
68—ERAGROSTIS PURSHII, Schrad.
69—ERAGROSTIS CONFERTA, Trin.
70—ERAGROSTIS CAPILLACEA, Nees.
71—ERAGROSTIS PECTINACEA, Gr.
73—ERAGROSTIS OXYLEPIS, Torr.
Grasses of a dry wood soil of little or no value.
74—FESTUCA NUTANS, L., WOOD FESCUE GRASS. Good.
75—FESTUCA TENELLA, Willd., SMALL FESCUE. Of little value.
76—FESTUCA UNIOLOIDES, Willd., SCHRADER'S, A good winter pasture grass.
77—BROMUS CILIATUS, SWAMP CHESS GRASS.
78—BROMUS CILIATUS, var purgans.
79—BROMUS SECALINUS, L., CHEET OR CHESS GRASS.
Of some value as early pasture grasses.
80—UNIOLA LATIFOLIA, Michx., BROAD-LEAVED SPIKED GRASS. Of some value.
81—UNIOLA GRACILIS, Rich.
82—UNIOLA PANICULATA. SEA OATS.
83—UNIOLA NITIDA,
Of no value.
84—PHRAGMITES COMMUNIS, Trin., REED. Of no value.
85—ELYMUS VIRGINICUS, L., WILD RYE, OR LYME GRASS. A good grass.
86—ELYMUS STRIATUS, WILLD RYE. Of little value.
87—HORDEUM PRATENSE, L., WILD BARLEY. Of no value.
88—DANTHONIA SERICEA, Nutt, WILD BARLEY. Of no value.
89—DANTHONIA SPICATA, Beauv. Of no value.
90—LOLIUM TEMULENTUM, L., POISON DARNEL. Worthless.
91—LOLIUM PERENNE, L., ENGLISH RAG GRASS. Excellent winter pasture in Southern districts.
92—ARRENATHERUM AVENACEUM, LARGE OAT GRASS. Naturalized. A fine hay grass.
93—AVENA FATUA, L., WILD OATS. Introduced, naturalized. Valuable.
94—PHALARIS INTERMEDIA, Bosc. WILD CANARY GRASS. Valuable.
95—HOLCUS LANATUS, L., SOFT MEADOW GRASS. A valuable meadow grass for winter pasture and hay in the coast region.
96—PASPALUM FLUITANS, Kth., stagnant water, ditches. Of little value.
97—PASPALUM WALTERI, ditches. Of no value.
98—PASPALUM DISTICHUM, L., JOINT GRASS. Low fields and ditches, troublesome and worthless.
99—PASPALUM PRÆCOX. Dry, sandy soil, of some value.
100—PASPALUM LATICULMUM, Kunth. A perennial pasture grass in the sandy soils of the coast region, scarcely inferior to Bermuda grass.

101—PASPALUM LÆVE, Michx. Dry, sandy soil, of some value.
102—PASPALUM FLORIDANUM, Mich. Dry sandy soil, of some value.
103—PASPALUM DIGITARIA, L. A good grass, but scarce.
104—PASPALUM CILIATIFOLIUM, Mch. Sterile, dry soil, of some value.
105—PASPALUM CILIATIFOLIUM, Var., (P. Setaceum, Michx.) Sterile, dry soil, of some value.
106—PASPALUM UNDULATUM, Bosc., (P. Boscianum Fluegge), BULL GRASS. Valuable in the coast region.
107—PANICUM SANQUINALE, L., CRAB GRASS. An important hay crop for the Southern districts.
108—PANICUM SEROTINUM. Good pasture grass.
110—PANICUM FILIFORME, L., SLENDER CRAB GRASS. Of little value.
111—PANICUM PROLIFERUM, SPROUTING PANIC GRASS. A large succulent grass yielding fine forage.
112—PANICUM GIBBUM, Ell., SPIKED PANIC GRASS. Valuable.
113—PANICUM HIANS, Ells. Low, wet places; an early valuable perennial.
114—PANICUM DIVERGENS, Michx. Little value.
115—PANICUM ANCEPS, Michx. Of some value.
116—PANICUM AGROSTIOIDES, Spreng. Of some value.
117—PANICUM VIRGATUM, L., TALL SWITCH GRASS. Of some value when young.
118—PANICUM LATIFOLIUM, L., BROAD-LEAVED PANIC GRASS. Of little value.
119—PANICUM PAUCIFLORUM, Ell. . " " " Of little value.
120—PANICUM VERRUCOSUM, L., WEAK PANIC GRASS. Of some value.
121—PANICUM VISCIDUM, Ell., COARSE PANIC GRASS. Of some value.
122—PANICUM CAPILLARE, Ell., HAIR GRASS. Worthless.

Grasses preferring a poor soil, of some value early in the season while tender.

123—PANICUM MICROCARPON, Mich.
124—PANICUM DICHOTOMUM, Var. Sphorocarpon, Ell.
125—PANICUM DICHOTOMUM, L.,
126—PANICUM LAXIFLORUM, Lam.,
127—PANICUM " var., Barbulatum,
128—PANICUM COMMUTATUM, Schult,
129—PANICUM LANUGINOSUM, Ell., (P. dichotomum var., lanuginosum)
130—PANICUM VILLOSUM, Ell., (P. dichotomum var., villssum)

131—PANICUM IGNORATUM, Renth. Of no value.
132—PANICUM RUFUM, Kanth. Of no value.
133—PANICUM COLONUM, L. An early valuable pasture grass.
134—PANICUM CRUS GALLE, LARGE CROW FOOT. Good.
135—PANICUM MOLLE, L., PARAGRASS. Introduced from Brazil; very valuable.

136—PANICUM CURTISII, Chap. Of some value.
137—PANICUM HIRTELLUM, L. Of some value.
138—PANICUM REPENS, L. Of value, binding the drifting sands of the seashore.
139—SETARIA GLAUCA, Beauv., var., lævigata. Chap. Of no value.
140—SETARIA VIRIDIS, Beauv. Of no value.
141—SETARIA COMPOSITA, Trin. Valuable.
142—CENCHRUS ECHINATUS, L.,
143—CENCHRUS TRIBULOIDES, L. } Troublesome and worthless.
144—STENOTARPHUM AMERICANUM, Sav. Of no value.
145—ROTTBŒLLIA CORRUGATA, Bald. Of no value.
146—TRIPSACUM DACTYLOIDES, L., GAMA GRASS. A rich, early grass, yielding an abundance of forage.
147—ANDROPOGON TENER, Kemth, SMALL SEDGE GRASS. Of little value.
148—ANDROPOGON MACROURUS, Mch., BROOK GRASS.
149—ANDROPOGON FURCATUS, Muehl, FORKED BROOM GRASS.
150—ANDROPOGON SCOPARIUS, Mchx., BROOM SEDGE.
151—ANDROPOGON VIRGINICUS, L.
} Sedge grasses growing on poor sandy soils, yielding during the earlier part of the summer an abundance of good pasturage.
152—ERIANTHUS ALOPECUROIDS, Ell.. TALL WOOL GRASS. Of no value.
153—SORGHUM NUTANS, Gr., INDIAN GRASS. Of some value; in barren soil.
154—SORGHUM HALEPENSE, L., EGYPTIAN GRASS, FALSE GUINEA GRASS, JOHNSON GRASS. Perennial; affords throughout the season, repeated cuttings, making excellent hay, cultivated throughout the State.
155—ANDROPOGON ELLIOTTII, of no value.
156—PANICUM JUMENTORUM, L., TRUE GUINEA GRASS. Cultivated at Mobile. Very valuable as a green forage crop.
157—VICIA CAROLINIANA, L., WILD TARES.
158—*VICIA SATIVA*, L., VETCHES or TARES. Valuable; a rich and early forage crop.
159—VICEA LUDOVICIANA, DEER PEA. Swamps on the coast; early and nutritious.
160—*TRIFOLIUM REPENS*, L., WHITE CLOVER. Valuable.
161—TRIFOLIUM PRATENSE, L., RED CLOVER. Cultivated; of great value in upper districts.
162—TRIFOLIUM REFLEXUM, L., BUFFALO CLOVER. Of little value.
163—TRIFOLIUM INCARNATUM, L., TURKISH CLOVER. Cultivated; well adapted for southern districts.
164—TRIFOLIUM CAROLINIANUM, SOUTHERN CLOVER. Of little value.
165—TRIFOLIUM PROCUMBEUS. L., Naturalized; of little value.
166—MEDICAGO DENTICULATA, L. } CALIFORNIA BURR CLOVERS.
166b—M. MACULATA, L., } Cultivated; excellent for winter pasture.
167—MEDICAGO SATIVA, L., LUZERNE, ALFALFA, PERENNIAL CLOVER. A most valuable forage plant.

168—MEDICAGO LUPUTINA, L., MEDDIC. Of some value.

169—*MELILOTUS PARVIFLORUS*, L., HONEY CLOVER, SWEET CLOVER, Introduced from Southern Europe. A good forage plant.

170—DESMODIUM NUDIFLORUM, De., } PEAVINES, TICKTRIFOIL.
171—DESMODIUM GLABELLUM, De., } Valuable.

172—*LESPEDEZA STRIATA*, Hook & Ar., JAPANESE CLOVER. Spread throughout the whole eastern Gulf region. Valuable for the range.

173—RICHARDSONIA SCABRA, L'Her., MEXICAN CLOVER. Of great value as a spontaneous hay crop in the sandy soils of the coast.

174—Thirty different kinds of Sorghum, mostly South African, and for the first time raised from seeds imported from the Cape of Good Hope by the Department of Agriculture; sown on April 11th and 16th, at Mobile, completely matured August 16th.

175—Asiatic and Indian varieties of Sorghum from Cullman, T. G. Cullman. Fully ripe by September 1st.

176—GREEN SUGAR CANE, (Saccharum officinarum, var;) Mobile Industrial Gardens.

176—BLUE CANE, RIBBON SUGAR CANE, (Saccharum officinarum) Mobile Industrial Gardens.

177—MILLO-MAIZE. A species of sorghum lately introduced from Africa, yields large crops of fodder by several cuttings during one season. From Geo. D. Rickarby Esq., Mobile, sown middle of April, received September 18th.

PRODUCTS OF THE FIELDS, ORCHARDS AND GARDENS OF CULLMAN COUNTY AND OF MOBILE COUNTY.

Ten years have just passed by since Col. Cullman, with the few of his first pioneers commenced to clear away the forest in making an opening for the site of the town which bears his name. The table lands of Sand mountain were then scarcely more than a trackless wilderness, in which the squatters sparsly scattered through it, depended almost entirely on the chanches of the chase for a livelihood. To-day the same region is inhabited by an industrious, thriving population amounting to tens of thousands of many homes, which sends to the Louisville Exposition a collection of agricultural products, in quality equal to those of sections of the State regarded as the most favored in regard to richness of their soil. Industry and perseverance combined with careful husbandry based on correct principles, have wrung from a soil naturally light but under the influences of the most genial and health inspiring climate, the choicest fruits, which readily accessible to market repay the settler in a way to make his home happy and comfortable. Of the products of its orchards Cullman County has sent since the opening of the Exposition over thirty choice varieties of apples, pears, and a number of different kinds of grapes in a perfection not surpassed anywhere east of the Mississippi river. The apples, pears and grapes of Mr. E. P. Johnson, of Decatur, and J. G. Cullman & Son, of Cullman, and another lot of apples comprising nearly thirty varieties sent afterwards to the exhibit by the first

of these parties, were pronounced to rank among the very best of fruits seen at the Exposition. The samples of various small grains of Maize, Sorghum, loose, in sheaves, and on the stalk, of grapes, and of forage plants in bundles, of tobacco, etc., testify sufficiently of the capabilities of the soil of Cullman and the adjoining Counties under the management of the industrious and intelligent farmer.

Scarcely less as in the northern part of the State are manifest the pulsations of a new active life in the development of the possibilities of the soil in its extreme southern section, also of a naturally light soil, sandy and porous in its nature, equally neglected and kept dormant, it has during a similar period of time been made to yield to intelligent labor and perseverance its products in vegetables and fruits at a season of the year and of a quality which insure them a ready demand in the markets of the Northwest. The raising of early vegetables for Northern markets in the pine lands of the gulf coast was first attempted in the coast plain surrounding Mobile; such was the success that with the increased facilities for transportation it has grown up to an industry second to no other of the interests of this port, and first in importance to its future prosperity. Reflecting upon the conditions of climate and soil of this region, its general geographical features and commercial relations, the conclusion must be arrived at that this part of the gulf region offers facilities for the truck farmer not surpassed by any other. The tempering influences of the gulf stream and of the atmospheric currents regulated by it give rise to conditions of temperature and moisture which happily combine to insure to the tender and early vegetable growth the required protection, and the fullest perfection at the period of their greatest demand. Equally favorable are the influences of the same causes on the long season of summer. The invigorating sea breezes with refreshing and frequent showers of rain, the so-called gulf showers, cool the atmosphere to a degree to render the heat much less oppressive than in the interior; cases of sunstroke are quite unheard of, and the laboring man from the North finds himself, to his astonishment, suffering less from the heat than in his former home, and the nights are always refreshingly cool. The mildness of the climate, the porous character of the soil—naturally well drained—and a copious supply of pure spring water, render this region highly salubrious; it truly deserves the name of the garden spot of the State, perpetually blooming and yielding its fruits almost month for month, throughout the year, to the cultivator of the soil. That investments made in truck farming here are safe and highly remunerative, will be evident to every one when the climatic advantages, the cheapness of the land, the facilities of the cultivation and the fertilization of the soil, and the ready access to the market by the great railroad lines intersecting it, are considered.

However, ample proof of this fact is found in the light of the experiences of the past few years. The value of the vegetables and fruits finding their outlet in Mobile county can be estimated to be in a favorable season not less than $350,000 to $400,000, and the production is rapidly increasing with every year. Along the Louisville and Nashville railroad line, through the coast belts of Mississippi and

Alabama, to the northern confines of the pine region in the latter State, lands, with a good clay foundation, admirably adapted for market gardening, can be had at the cheapest rates. No more inviting field can be found open to the settler with a small capital in this healthful and genial section. On account of the perishable nature of its chief products, and completely out of season at the time of the exhibition, but little can be shown of them. In No. 283 a sample of early potatoes, ready for the market by the first of April will be seen; of fruit are only found the Japanese Plums (No. 282), Pecan Nuts (No. 269) and preserved Figs (No. 284). The Scuppernong Grape, with its abundant and never failing crops, has been made to yield a white wine (No. 285) of exceedingly fine flavor and quality, with the highest promise for this pine region as a wine-producing district.

As a proof for the successful cultivation of the tropical sugar cane, will serve the specimens No. 176, from the Mobile Industrial Gardens, furnished by Mr. J. Renth, and for that of Rice from the same district, the samples of that cereal in the rough and cleaned state, found in the grain case. The advantages for the raising of grain, forage and hay crops, of such importance to the market gardener, to increase his manurial resources, by the keeping of an adequate number of cattle have already been alluded to. See Millo Maize (No. 277), Guinea Grass (No. 156), Johnson Grass (No. 154), Para Grass, Mexican Clover (No. 173), German Millet (No. 192), Cow Peas, and Vetches (No. 157).

GRAINS AND GRASSES IN SHEAVES.

178—OATS. Cullman, Ala.
179—FOULZE WHEAT, Von Werdt.
180—RED BEARDED WHEAT.
181—WINTER WHEAT. J. File.
182—RYE "
183—MEXICAN CLOVER, RICHARDSON'S SCABRA. Mobile, J. Delchamps
186—ALFALFA, OR LUZERNE CLOVER. Cullman & Son.
187—WHITE HONEY CLOVER, (Melilotus Alba). Cullman & Son.
188—MIXED HAY, CLOVER AND TIMOTHY. " "
189—RED TOP AND TIMOTHY mixed. " "
190—RED TOP HAY. " "
191—TIMOTHY HAY. " "
192—GERMAN MILLET. " "
193—FORKED BROOM GRASS. " "
194—GAMA GRASS. Mobile, Ala.
194b—COW PEA VINE. Cullman, Ala.
195—WILD RYE, OR LYME GRASS. Blount County.
196—SWAMP CHEAT, OR CHESS GRASS. Blount County.
197—BROAD-LEAVED UNIOLA. Blount County.
198—JOHNSON GRASS, EGYPTIAN GRASS.
199—EARLY BUNCH GRASS, (Eatonia obtusata). Mobile.
200—WHITE BENT, OR TIOREIN GRASS. Blount County.
201—MEDITERRANEAN WHEAT. Young.
202—WINTER WHEAT. Chris. Grob.
203—RYE. H. Von Werdt.
204-205—WHITE WHEAT. J. Heresford and Cullman & Son.

206—RYE. Evans.
207-208—BARLEY. Young. File.
209-210—BEARDED RED WHEAT. J. Grob.
211-212—WHITE SPRING OATS. Koesler, Heresford.
213—WINTER OATS. Koesler.
214—SUMMER OATS. Chris. Rambo.
215-216—RYE. Chris. Rambo and Cullman & Son.

GRAINS IN BULK EXHIBITED IN GRAIN CASE.

217—WHITE FLINT CORN. Cullman & Son.
218—WHEAT. Cullman & Son.
219—RYE. H. Von Werdt.
220—CHOWDER PEA. Cullman & Son.
221—BLACK EYE PEA. " "
222—RED RUST PROOF OATS. " "
223—BLACK OATS. " "
224—YELLOW CORN. " "
225—RICE IN HULL. Mountain & Son, Mobile.
226—RICE CLEANED. " " "
227—CORN IN STALK. BLOUNT'S PROLIFIC, with 3-4 perfect ears on stalk, 18-19 feet high, very fine. E. P. Johnson, Decatur.
228—CORN IN STALK, WHITE DENT CORN. E. P. Johnson, Decatur.
229—CORN IN STALK, WHITE FLINT, very fine. Heidenreich, Cullman County.
230-231—CORN IN STALK, WHITE FLINT. Cullman & Son, Cullman.
232-233—TOBACCO. J. G. Cullman.

ROOT CROPS, VARIOUS GARDEN PRODUCTS, GRASS SEEDS.

In consequence of the perishable nature of the first of the products mentioned, many had disappeared by the time of the writing of this catalogue, including Beets, Turnips and Onions.

235 to 243—IRISH POTATOES, CANADA RED. DR. STIEFELMEIER. Mrs. Zeigler, Cullman.
236—IRISH POTATOES, ALABAMA RED. Geo. Merlet, Cullman.
237-239-241—IRISH POTATOES, EARLY ROSE. J. G. Cullman, Cullman.
240—IRISH POTATOES, BURBANK. Geo. Klein, Cullman.
242—IRISH POTATOES, EARLY OHIO. J. G. Cullman, Cullman.
243-4—IRISH POTATOES, LADY'S FINGER. Geo. Klein, Cullman.

These Potatoes were harvested between the second week of June and the 15th of July.

245—COTTON STALK, "OZIER." F. P. Johnson, Decatur.
246—COTTON STALK, JONES' PROLIFIC. F. P. Johnson, Decatur.
246*b*—IMPROVED COTTON, 20 stalks with open bolls, improved from the common seeds by McCoy, of Greenville. Entered for competition.
247—HOP VINES. J. G. Cullman.
248—HEMP IN STALK. J. G. Cullman.
249 to 262—Samples of various kinds of BARLEY, WHEAT, RYE, OATS, CORN, FIELD PEAS, BEANS, from Cullman County, displayed in glass jars. Furnished by J. G. Cullman & Son, with the following Grass Seeds, etc.:

263—HOPS.
264—ESPARSETTE OR SANFOIN.
265—TIMOTHY GRASS SEED.
266—RED TOP OR HERDS GRASS SEED.
267—GERMAN MILLET SEED.
268—RED CLOVER SEED.
269—PECAN NUTS, from Mobile.
270—CASE WITH COCOONS OF SILK WORM, Raw Silk, and Leaves of White Mulberry, furnished by S. R. & J. R. Lowry, Huntsville.
271—COCOONS OF SILK WORM. J. G. Cullman.

COTTON.

COTTON PLANTS. Eighteen varieties, grown in pots, by S. Schuessler, Montgomery, August 16th. Exhibited by S. Dryfus & Co., Montgomery. Raised at Reas' plantation.
272—BALE OF COTTON, first of the season.
273-276—FOUR CASES WITH RAW COTTON, showing the four different types or grades of Classification established by the Cotton Exchange of Mobile. Furnished by Allen, Bush & Co., Mobile.
277—COTTON SEED. Montgomery Oil Works.
278—COTTON SEED OIL-CAKE. " " "
279—RAW COTTON SEED OIL. " " "
280—REFINED COTTON SEED OIL. " " "
281—COTTON SEED MEAL. " " "

282—JAPANESE PLUMS, the fruit of ERYOBOTRYA JAPONICA. Ripens at Mobile in the middle of March. Mrs. C. Mohr, Mobile.
284—FIGS. Preserved by Mrs. C. Mohr, Mobile.
283—PEERLESS POTATOES. Brought to market at Mobile, April 1st. Chas. Zundel, Point Clear, Baldwin County.
285—SCUPPERNONG WINE. Vintage 1879. Made by Chas. Mohr, Mobile.
286—OYSTER SHELLS, of the famous Bon Secour Plants. Smith & Dumas, Mobile Conuty.
286*b*—BUNCH OF REEF OYSTERS. Mobile Bay.

NAVAL STORES.

Furnished by Chess Carley Co., Mobile.

287—SPIRITS OF TURPENTINE.
288-295—ROSIN, various grades, in four samples.

CLASS III.

MINERALS OF ALABAMA AND PRODUCTS OF THE INDUSTRIES CONNECTED WITH THE MINING INTERESTS.

The collections in this class were made under the direction of R. W. A. Wilda, general land agent of the Louisville and Nashville Railroad, Birmingham.

If a mere glance over the list of the articles displayed in this part of the Exhibit shows the great variety of useful minerals found in the State, so can the specimens exhibited not fail to impress the visitor with the vastness of the quantities in which those of the most importance abound and of the resources represented by them. The building stones, iron ores and coals have to that effect been secured in masses of many tons in weight; the same object has been kept in view in regard to the other useful minerals, viz: Potters' clays, porcelain earths, etc., which are shown in quantities to give a correct idea of their practical value. The geological survey of Alabama furnished a collection of the useful minerals of the State in 35 specimens of cabinet size.

Haynes' field map of the coal and iron region of North Alabama, drawn by Paul Boudousquie, Esq., of Mobile, and kindly furnished for this occasion by Major Damrel, of the corps of United States Engineers, Mobile, will assist those particularly interested to arrive at a more definite estimate of the extent of its resources and to localize them properly, by showing the areas covered by the coal fields, with their workable seams, outcrops, and places of development, and also of the iron deposits, the limestone region and the centres of mining industries.

BUILDING STONES, LIMESTONES, POTTERY MATERIALS, ETC.

The Alabama Building Stone is represented in the display furnished by T. L. Fosstick & Co., Ingleton Quarries and Steam Stone Works, Dickson, Colbert County, consisting of the following pieces:

1—Highly finished slab with name of the firm, letters in relief, polished.
2-3—Architraves with inscriptions.
4-8—Cubical blocks of various sizes and finish.
9—Square oblongs, 3 to 4 feet long, 4 inches through.
10-11—Flat square pieces, similar length, 1 inch thick.
12—Large Monumental Tablet, resting upon a square base 4 feet in height, 10 feet long, and over 5 tons in weight.
14—One-half inch polished slab 2x4 feet.

13—Slab of cloudy marble from Talladega. Furnished by Frank Burns.
15—Building Stone of Lauderdale County. Miss Mary Houston.
16—Square block of Red Syenit, polished. Talladega Co., F. Burns.
17—Fine grained Limestone for building. Lauderdale Co., F. Burns.
18—Square block of finished Foolithic Limestone. Lauderdale Co., F. Burns.
18b—Slab of same material.
18c—Square flat piece of same material.
18d—Finished Windowsill, of same material.
19—Square block finished Building Stone. Flint Quarries, Lauderdale County.
20-22—Square blocks finished Building Stone. Brown's Quarries, Colbert County.